DP BARCODE #153743

266945
Record No.

SHAUGHNESSEY NO. REVIEW NO.

EEB REVIEW

APR 4 1991

DATE: IN 7/26/90 OUT

FILE OR REG. NO. 070590

PETITION OR EXP. NO.

DATE OF SUBMISSION 7/5/90

DATE RECEIVED BY EFED 7/23/90

RD REQUESTED COMPLETION DATE 9/9/90

EEB ESTIMATED COMPLETION DATE 9/9/90

RD ACTION CODE/TYPE OF REVIEW 117

TYPE PRODUCT(S) : I, D, H, F, N, R, S

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. 21

PRODUCT NAME(S) COPPER-8 QUINOLINOLATE

COMPANY NAME MAAG AGROCHEMICAL INC.

SUBMISSION PURPOSE REVIEW-PROTOCOL FOR FISH LIFE-CYLCE STUDY

SHAUGHNESSEY NO.	CHEMICAL, & FORMULATION	% A.I.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

SUBJECT: Review protocol of fathead minnow life-cycle test for evaluating chronic toxicity to oxine copper (copper 8-quinolinolate)

FROM: James Akerman, Chief
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C)

3/28/91

TO: Ben Chambliss, PM 21
Registration Division

The registrant, MAAG Agrochemicals Inc, has submitted a protocol for determining the chronic toxicity of oxine copper to fathead minnows (Pimephales promelas). The objectives of the test are to determine the compounds affect on survival, growth, development and reproduction for the fathead minnow during a full life-cycle exposure under flow-through test conditions. The registrant expects to establish the Maximum Acceptable Toxicant Concentration (MATC) limits for the test substance based upon such biological effect criteria as egg hatchability, embryo-larval-juvenile survival and growth, and adult reproduction. Exposure will include fertilization through embryonic, larval, juvenile and adult stages and end not less than 28 days after hatching of the F_1 generation.

The Ecological Effects Branch (EEB) has reviewed this protocol with regard to established EPA fish life-cycle testing procedures and would like to clarify or include the following points:

1) 12.5.4 Second Generation Embryo exposure: F_1 fry are to be measured on day 1 post hatch and weighed and measured at test termination.

2) 14.0 Quality Criteria: In addition to the criteria listed, test may be unacceptable if the relative standard deviation in total egg production for controls is greater than 20%.

3) Registrant must submit all replicate data and not just summary information.

Including these slight modifications/clarifications, EEB accepts this protocol for evaluating chronic toxicity of oxine copper to fathead minnow life-cycle. (Miachel Rexrode 557-0578).